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(54) Title of the Invention: Recording reservation controller

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(72) Inventor: Takashi Shimoide
601 Hirahari 1-chome,
Tenpaku-ku, Nagoya-shi, Aichi-ken

(71) Applicant: Patorama Research Ltd.
18-17 Chiyoda 2-chome,
Naka-ku, Nagoya-shi, Aichi-ken

(74) Agent: Patent Attorney, Tsutomu Adachi
(and 2 others)

SPECIFICATION

1. Title of the Invention

Recording reservation controller

2. Scope of Claims

1 A recording reservation controller attached to a video recording device for recording the broadcast content of a television so as to control the recording thereof, characterized in that it comprises:

memory means for memorizing in advance information including at least the content and the broadcast time of a television broadcast;

display control means for outputting said memorized information to a television receiver and displaying it in a schedule format in said television receiver;

selection means for selecting the desired broadcast content from said displayed information; and

recording setting means for setting said broadcast time in recording reservation means of the video recording device in accordance with said selected information.

3 Detailed Description of the Invention

Object of the Invention

[Field of Industrial Utilization]

The present invention relates to a recording reservation controller for implementing recording reservation.

[Prior Art]

Accompanying the widespread use of video recording

devices (so-called videotape recorders), a range of devices for automatically performing recording at a time set in advance has been proposed. A diverse range of setting contents are used in recording devices such as this including the recording start time, the channel on which the program is broadcast, and the recording end time, and this setting requires both a significant amount of time and a significant level of expertise. Thereupon, with the aim of making the setting of recording reservation simple for those with no expertise in the operation of machines such as the elderly, a recording device that uses a barcode to read the recording start time and comprises a function for, using a weekly unit, the recording of the same program at the same time each week has been proposed.

[Problems to be Solved by the Invention]

However, there are problems inherent to the use of recording devices such as this in that, because they employ a so-called "promise" method based on the use of a barcode, their operation requires no intuition and, moreover, is complex. Setting is very complicated using a barcode, particularly for the recording of programs on different channels of consecutive broadcast time and when the same program is broadcast at a different time depending on the week. In addition, reading errors are liable to occur using a barcode. For this reason, there is demand for an improved device for simplifying the recording reservation of a desired

program.

With the resolution of this problem in mind, an object of the present invention is to achieve a simplification of the recording reservation.

Constitution of the Invention

The constitution of the present invention for achieving this object is hereinafter described.

[Means to Resolve the Problems]

The recording reservation controller of the present invention which, as shown in Fig. 1,

constitutes a recording reservation controller attached to a video recording device VTR for recording the broadcast content of a television so as to control the recording thereof, characterized in that it comprises:

memory means ME for memorizing in advance information including at least the content and the broadcast time of a television broadcast;

display control means DC for outputting said memorized information to a television receiver TV and displaying it in a schedule format in said television receiver TV;

selection means SL for selecting the desired broadcast content from said displayed information; and

recording setting means RS for setting said broadcast time in recording reservation means TM of the video recording device VTR in accordance with said selected information.

[Action]

As described below, the recording reservation controller of the present invention of the configuration described above is attached to a video recorder for recording the broadcast content of a television to control the recording thereof.

Information including at least the content and the broadcast time of a television broadcast memorized in advance in memory means ME of the recording reservation controller is output to a television receiver TV by display control means DC and displayed in a schedule format in the television receiver TV. Accordingly, the broadcast content and broadcast time can be viewed in the same format as the television broadcast program schedule listed in a newspaper or television magazine. In this state, information is selected by selection means SL by, for example, the moving of a cursor and a flash display or inverse display accompanying this whereupon, in accordance with the selected information, the broadcast time of the selected broadcast content is set in recording reservation means TM of the video recording device by recording setting means RS.

Accordingly, when the selected program time is reached, the video recorder VTR executes recording using the recording reservation means TM in accordance with the broadcast content displayed in a schedule format in the television receiver TV.

[Embodiment]

In order to further clarify the constitution and action of the present invention described above, a preferred

embodiment of the recording reservation controller of the present invention will be hereinafter described. Fig. 2 is a perspective view showing the external appearance of a recording reservation card 1 which serves as one embodiment of the recording reservation controller of the present invention, a videotape recorder (VTR) 3, and a television receiver 5 connected thereto by way of a cable 4. As shown in the drawing, the VTR 3 comprises, for example, a cassette insert part 7 into which a video cassette tape is inserted, a time display part 8 that displays the current time, and a junction part 10 into which the card-shaped recording reservation card 1 is inserted from above.

The recording reservation card 1, on which the content and the times and the like of one week to several weeks of broadcast television programs are recorded in advance, is sold individually or together with a weekly or monthly magazine that contains a commentary of the programs. While in the present embodiment the content of the programs and so on are memorized in a ROM as described below, this content may be memorized in an a rewritable PROM or battery-backed RAM, and it may be rewritable using a vending machine or the like. The recording reservation card 1 is employed by attachment to the junction part 10 of the VTR 3.

Control keys 11, 12, 13 on which characters such as "setting", "weekly" and "serial" are printed and cursor keys 21, 22, 23, 24 on which up/down left/right arrows are printed

are provided on the upper surface of the recording reservation card 1. A connector 30 that connects with the junction part 10 of the VTR 3 is provided in the lowermost end of the recording reservation card.

Next, the internal configuration of the recording reservation card 1 and VTR 3 will be described with reference to Fig. 3. As shown in the drawing, a key input port 35 and input/output port 38 which are mutually connected by way of a well-known CPU 31, ROM 32 and RAM 33 by means of a bus 34 are provided in the internal part of the recording reservation card 1.

Together with a control program, a simple description of one to four weeks of broadcast program content and the broadcast start and end times are memorized in the ROM 32. In addition, the keys 11 to 13 and 21 to 24 provided on the upper surface of the card are connected to the key input port 35 into which the operational state of the keys is input. The input/output port 38 serves as a port for exchanging data and so on with the internal controller of the VTR3 and, when the recording reservation card 1 is attached to the VTR3, it is connected to an internal bus 45 by way of a connector 3.

Meanwhile, in addition to a well-known CPU 51, ROM 52, RAM 53 and timer 55 which are mutually connected by way of the bus 45, a tuner 60 for demodulating the picture image and sound signal received as television broadcast electromagnetic waves by way of an antenna 57, a recording reproducer 65 for

recording or reproducing the demodulated signal on a videotape, and a picture image signal outputter 70 for outputting the picture image signal to the television 5 are provided in the internal part of the VTR 3. The timer 55 comprises a calendar function for managing the date and a 24hr timer function, and when the time set by the CPU 51 in advance by way of the internal bus 45 is reached, this time is notified to the CPU 51 as an interruption and the current time is displayed in the time display part 8. In addition, the tuner 60 can select a channel for demodulation based on a command received from the CPU 51. While the demodulated picture signal of the selected channel is output to the recording reproducer 65, the control signal of the CPU 51 is also output to the recording reproducer 65, and the recording reproducer 65, upon receipt of these signals, executes the drive of a recording reproducing head and the control of a tape reel drive motor (neither of which is shown in the diagram) in response to the recording and reproduction of the picture signal. Furthermore, the picture image signal outputter 70 selects one of either the picture image signal of any channel that has been demodulated by the tuner 60, the picture image signal reproduced by the recording reproducer 65, or the picture image signal generated as a result of the reading of image data memorized in the RAM 53 by the CPU 51 and, following the temporary accumulation of this signal in an internal video memory not shown in the diagram, the signal

is regularly output to the television receiver 5.

Next, with reference to the explanatory diagram of a program schedule shown in Fig. 4 and the flow charts shown in Fig. 5 and Fig. 6, the processing executed by the CPU 31 and 51 of the recording reservation card 1 and the VTR 3 will be described. When the recording reservation card 1 is attached to the VTR3 and the power is switched on, a card-side processing routine shown in Fig. 5 is initiated in which, first, the processing for the initialization and so on of the cursor position is executed (Step 100). The initial position of the cursor is a start point set in advance which, in the program schedule shown in Fig. 4, is a position that corresponds to the channel of lowest number and the program of the earliest time slot (program A1 in this embodiment). Thereafter, the program schedule is read from the ROM 32 (Step 110) and the processing for the outputting of the program data of the region correspondent to the cursor position and the cursor position data to the VTR 3 by way of the input/output port 38 is executed (Step 120). That is to say, because not all of the program schedule can be displayed at one time on the television receiver 5, a single screen segment around the position of the cursor is output. The output program data is temporarily memorized in the RAM 53 by way of the connector 30 and then sent to the picture image signal outputter 70 by the control of the CPU 51 where, following conversion into a picture image signal, it is

output to the television receiver 5. Thereafter, the operation of a key provided in the surface of the recording reservation card 1 is awaited (Step 130), and the routine shifts to the processing of Step 140 and beyond in response to said input key.

If the input key is the cursor key, cursor data is output in response to one of either of the operation keys 21 to 24 (Step 140), and a processing for the updating of the cursor position information memorized in the RAM 33 in response to the configuration of the program schedule is executed (Step 150). For example, when the upward-facing arrow cursor key 21 is operated with the cursor in the program C3 position shown in Fig. 4, this data is output to the picture image signal outputter 70 of the VTR 3 and, in addition, the cursor position information of the recording reservation card 1 is updated from program C3 to the program C2 position. In addition, if the right-facing arrow cursor key 24 is operated, the cursor position information is updated from the program C3 to the program D3 position. Following the execution of the above processing, the routine returns to Step 120 and the processing of Step 120 and beyond is executed. Accordingly, if the cursor is shifted to a region outside the region currently being displayed, the region of the displayed program is also updated by the processing of Step 120.

If the input key in the judgment of Step 130 is deemed

to be the "setting" key 11, a processing for the reading of the start time of the program and the channel number thereof from the ROM 32 in response to the current cursor information position (Step 160) and, thereafter, a processing for the output of the recording start time to the CPU 51 of the VTR 3 (Step 170) is executed. For example, when the cursor is at program C3 an 8.45 program start time and channel CH5 are read and output. Thereafter, a processing for the reading of the end time of the program (Step 180) and for the output of this time is executed (Step 190). In the above example a 9.30 end time is read and output.

On the other hand, if the "weekly" key 12 is input, a search of the programs for the next week and beyond memorized in the ROM 3 is conducted (Step 200), and a judgment is made of whether or not a program the same as the program where the cursor is currently positioned is present in the next week and beyond (Step 210). If the same program is present in the next week and beyond, similarly to the previously described operation of the "setting" key, the start time, which includes the date of the program, and the channel are read and output and, furthermore, the end time of the program is read and output (Steps 160 to 190). If the same program is not present, the routine moves to Step 120 without alteration and the processing from the key input is repeated. Based on this processing, even if the same program is broadcast at a different time in the next week and beyond, it can be easily

reserved. The processing at the VTR3 side will also be described.

If the input key in Step 130 is the "consecutive" key 13, a processing for the cancellation of the end time of the consecutive program of the previously set plurality of programs is executed (Step 220). As a result, when the recording of a consecutive plurality of programs is to be set (including programs on the same or different channels), there is no need for the power down of the power source for the VTR3 each time the broadcast time of a program is completed.

While the processing of the recording reservation card 1 is described above, the following processing is performed at the VTR3 side in response to this processing. As shown in Fig. 6, first of all the output of data from the recording reservation card 1 is awaited (Step 300) and, when this data is received, the content thereof is adjudged (Step 310). If the output content is cursor data (corresponding to Fig. 5 Step 140), the CPU 51 outputs data to the picture image signal outputter 70 and updates the inverse position of the program being displayed (Step 350). For example, if the diagonal-line shaded program C3 of Fig. 4 is inversely displayed, when information to the effect that the downward-facing arrow cursor key 22 has been operated is sent from the recording reservation card 1, the program C4 is inversely displayed and the program C3 is switched over to the output of the normally displayed picture image signal.

On the other hand, if the content of the output from the recording reservation card 1 is the program schedule data, it is temporarily accumulated in the RAM 53 correspondent to the data output by Step 120 in Fig. 5, following which processing for its setting in the picture image signal outputter 70 as data to be displayed in the television receiver 5 (Step 320) and processing for the input of cursor position data output by the recording reservation card 1 is executed (Step 330). Thereafter, a processing for the setting of the position of the inverse displayed program in the picture image signal outputter 70 in accordance with the input cursor position data is executed (Step 340).

In addition, if the output content from the recording reservation card 1 is the set time information correspondent to Steps 170 and 190 of the card-side processing, a processing for the temporary memorizing of this information in the RAM 53 (Step 360), and a processing for the setting in the timer 55 of the data and time closest to the current time of the memorized plurality of time information is executed (Step 370). When the set data and time are reached, the timer 55 sends an interruption to the CPU 51, and a processing for driving the timer 60 and recording reproducer 65 so as to record the memorized channel program on the video cassette tape is executed.

Following the completion of the processing of Steps 310 to 370, the routine returns to Step 300 and is repeated from

the processing for the awaiting of the data output from the recording reservation card 1.

The user executes the setting of the recording reservation outlined hereinafter using the recording reservation card 1 processing and the VTR 3 processing as described above.

(1) First, when the recording reservation card 1 is attached to the VTR 3 and the power source is switched on, part of the program schedule for that day is displayed in a schedule format in the television receiver 5 as shown in Fig. 4. The desired program can be inversely displayed by the operation of the cursor keys 21 to 24 and, if a cursor operation for the movement of an inverse display part outside the region currently being displayed is performed, the display region is updated. Although the processing for the display of a program schedule other than the program schedule for this day is not specifically described, a special-purpose key may be provided, and the adoption of a configuration for the display of the program schedule of the previous day and the next day based on the combination of the cursor key 21, 22 and other keys is also suitable.

(2) When the "setting" key 11 of the recording reservation card 1 is operated in the state in which the desired program is inversely displayed, the start time, including the date of the program, as well as the channel and the end time are memorized and, when the start time is

reached, the VTR3 starts the recording and, when the end time is reached, it ends the recording.

(3) When the recording reservation of a particular program is performed following the operation of the "weekly" key 12, a search of the program content of the following week and beyond memorized in the ROM32 in advance is carried out and, if a program the same as the current inverse displayed program is present, the start time, including the date, as well as the channel and the end time are set. Accordingly, even if the same program is broadcast in a different time slot, the recording reservation can be performed without error.

(4) When the recording reservation of a plurality of programs is performed following the operation of the "consecutive" key 13, the setting of the end time of the program of the consecutive time slot of the recording reserved programs is cancelled. Accordingly, when a plurality of programs are recorded in consecutive time slots, there is no need for the power down of the power source VTR3 each time a set program ends, which is of course desirable from the viewpoint of the durability of the VTR3.

As is described above, one to several weeks' worth of program content and the start and end times thereof are memorized in the recording reservation card 1 of this embodiment and, because this is displayed in the television receiver 5 for use for the recording reservation of a

program, recording reservation can be very easily performed. Because the recording reservation involves merely the selecting of a program, the trouble inherent to the setting of time and the reading of a barcode and the like is eliminated and, accordingly, individuals with no experience in the operation of machines such as this can perform this operation easily. Furthermore, because this embodiment enables same content programs to be searched, even when a serial program is broadcast in a different time slot, the recording reservation thereof can be easily performed.

Although one embodiment of the present invention is described above, the present invention should not be regarded as being restricted to this embodiment alone and, in a range that is not outside the gist of the present invention, it may of course be embodied in a variety of modes such as, for example, a configuration for the selection of the desired program using, instead of a cursor key, a touch board, mouse or write pen grounded to the screen of the television receiver, and a configuration for the direct provision of the setting key in the VTR.

Effect of the Invention

According to the recording reservation controller of the present invention described above, recording reservation can be performed by simply selecting a program while viewing the program content displayed in a schedule format on a television receiver and, accordingly, this has the excellent

effect of enabling the recording reservation of a program to be greatly simplified.

4 Brief Description of the Drawings

Fig. 1 is a block diagram showing the fundamental configuration of the present invention; Fig. 2 is a perspective view showing the external appearance of a recording reservation card 1 as one embodiment of the present invention and a video recorder 3; Fig. 3 is a block diagram showing the internal configuration of said recording reservation card 1 and video recorder 3; Fig. 4 is an explanatory diagram showing one example of program display in this embodiment; Fig. 5 is a flow chart showing the processing executed at the recording reservation card 1 side; and Fig. 6 is a flow chart showing the processing executed at the videotape recorder 3 side.

1 Recording reservation card

3 Videotape recorder (VTR)

5 Television receiver

11, 12, 13 Control key

21, 22, 23, 24 Cursor key

55 Timer 60 Tuner

65 Recording reproducer 70 Picture image signal outputter

Agent: Patent Attorney, Tsutomu Adachi (and 2 others)

FIG. 1

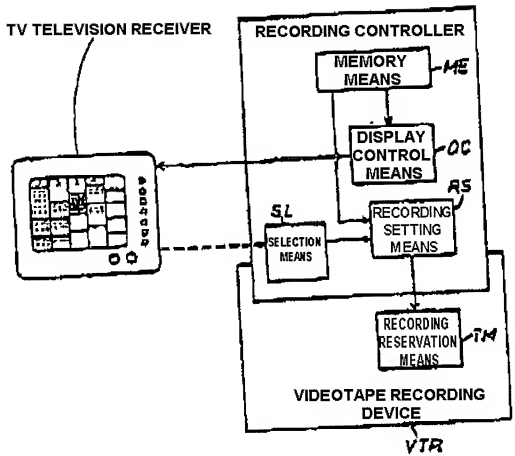

TV TELEVISION RECEIVER
RECORDING CONTROLLER
MEMORY MEANS
ME
DISPLAY CONTROL MEANS
DC
RS
SL
SELECTION MEANS
RECORDING SETTING MEANS
RECORDING RESERVATION MEANS
TM
VIDEOTAPE RECORDING DEVICE
VTR

FIG. 2

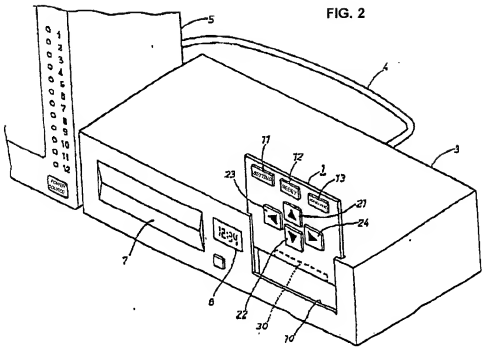


FIG. 3

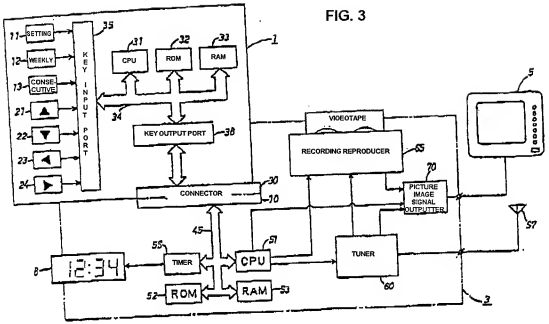

SETTING
WEEKLY
CONSE-CUTIVE
KEY INPUT PORT
CPU
ROM
RAM
KEY OUTPUT PORT
CONNECTOR
VIDEOTAPE
RECORDING REPRODUCER
PICTURE IMAGE SIGNAL OUTPUTTER
TUNER
TIMER
CPU
ROM
RAM
12:34

FIG. 4

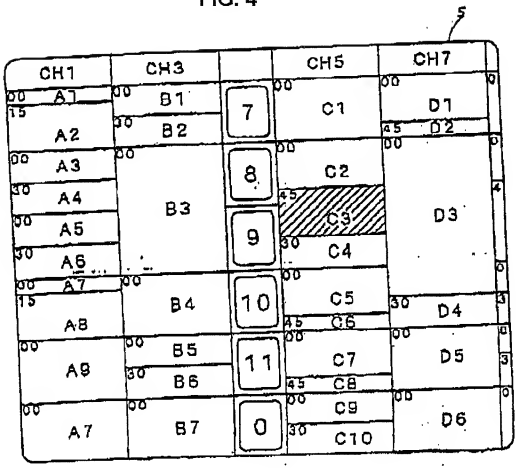

5
CH1
CH3
CH5
CH7
A1
A2
A3
A4
A5
A6
A7
A8
A9
A7
B1
B2
B3
B4
B5
B6
B7
7
8
9
10
11
0
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10
D1
D2
D3
D4
D5
D6

FIG. 5

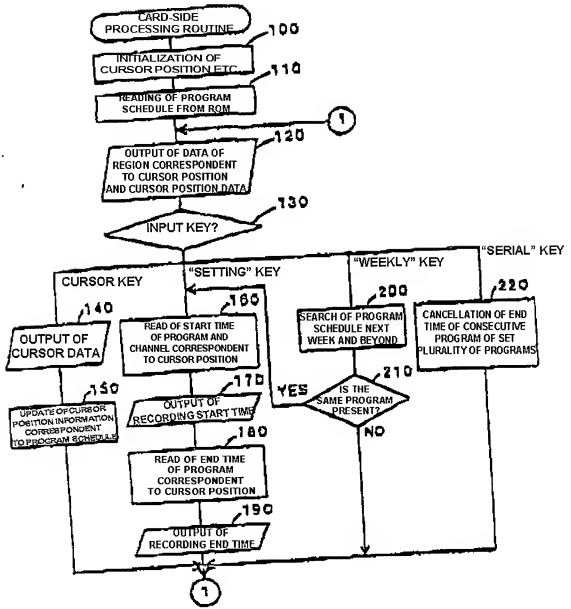
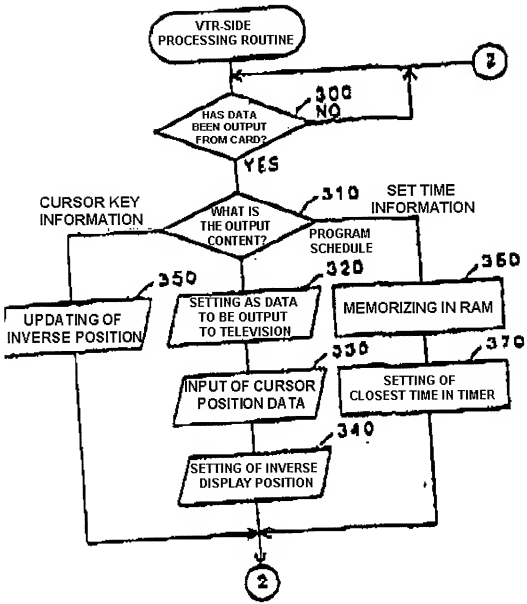

CARD-SIDE PROCESSING ROUTINE
100
INITIALIZATION OF CURSOR POSITION ETC.
110
READING OF PROGRAM SCHEDULE FROM ROM
1
120
OUTPUT OF DATA OF REGION CORRESPONDENT TO CURSOR POSITION AND CURSOR POSITION DATA
130
INPUT KEY?
CURSOR KEY
"SETTING" KEY
"WEEKLY" KEY
"SERIAL" KEY
140
OUTPUT OF CURSOR DATA
160
READ OF START TIME OF PROGRAM AND CHANNEL CORRESPONDENT TO CURSOR POSITION
200
SEARCH OF PROGRAM SCHEDULE NEXT WEEK AND BEYOND
220
CANCELLATION OF END TIME OF CONSECUTIVE PROGRAM OF SET PLURALITY OF PROGRAMS
150
UPDATE OF CURSOR POSITION INFORMATION CORRESPONDENT TO PROGRAM SCHEDULE
170
OUTPUT OF RECORDING START TIME
YES
210
IS THE SAME PROGRAM PRESENT?
NO
180
READ OF END TIME OF PROGRAM CORRESPONDENT TO CURSOR POSITION
190
OUTPUT OF RECORDING END TIME
1

FIG. 6


VTR-SIDE PROCESSING ROUTINE
2
300
HAS DATA BEEN OUTPUT FROM CARD?
NO
YES
310
WHAT IS THE OUTPUT CONTENT?
CURSOR KEY INFORMATION
SET TIME INFORMATION
PROGRAM SCHEDULE
350
UPDATING OF INVERSE POSITION
320
SETTING AS DATA TO BE OUTPUT TO TELEVISION
360
MEMORIZING IN RAM
330
INPUT OF CURSOR POSITION DATA
370
SETTING OF CLOSEST TIME IN TIMER
340
SETTING OF INVERSE DISPLAY POSITION
2

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PROCEDURAL AMENDMENT FORM

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January 8, 1996

For the Attn. of: Commissioner of the Patent Office, [illegible] Kiyokawa

1. Case Displayed
   Japanese Patent Application No. S63-138679

2. Party making the amendment
   Relationship to case: Patent Applicant
   Title: [illegible]
   Address: [illegible], Amsterdam, Holland 1071
   Representative: [illegible]
   Nationality: Dutch

3. Agent
   Name: (8250) Patent Attorney, Tsutomu Adachi [SEAL]
   Address: Nagoya Seni Bldg.
   9-27 Nishiki 2-chome, Naka-ku, Nagoya-shi 460
   TEL: 052-231-7835 FAX 052-231-0515

4. Date of amendment order: Voluntary

5. Number of inventions increased as a result of the amendment: 1

6. Subject of the Amendment

"Title of the Invention", "Scope of Claims", "Detailed Description of the Invention" and "Brief Description of the Drawings" of the specification.

7. Details of Amendment

(1) The title of the invention is to be amended to "Broadcast content receiver".

(2) The scope of the claims is to be amended as indicated in Attachment 1.

(3) The "Accompanying the spread of the use of video recording video …proposed." of lines 5 to 7 of column 2 of the specification is to be amended as follows:

"Even though televisions have been around for a long time, it is not uncommon for people to inadvertently miss watching television broadcast content that they had intended to watch. Principal causes of this including mistaking the broadcast time and becoming absorbed in another activity and simply forgetting about the broadcast.

"An effective method of dealing with this issue is to reserve the broadcast content that one wants to watch in a video recording device (so-called video recorder) in advance. However …".

(4) The "achieve a simplification of the recording reservation" of lines 8 to 9 of column 3 of the specification is to be amended to read "provide a broadcast content receiver for preventing missing a television program that one wished to watch that, moreover, is easily operable".

(5) The "The recording … RS" from line 7 from the bottom of column 3 to line 8 of column 4 of the specification is to be amended as follows:

"A broadcast content receiver comprising a tuner for outputting the desired broadcast content from a received plurality of television broadcast content and a television receiver for displaying the picture image signal of the broadcast content extracted by said tuner, characterized in that it comprises:

"input means for uploading from the exterior to said broadcast content receiver information containing at least the television broadcast content and broadcast time;

"storage means for temporarily storing the information uploaded by said input means;

"display control means for reading said stored above information and outputting it in a schedule format to the above television receiver;

"selection means for selecting the desired broadcast content from said displayed information; and

"broadcast content output means for, in accordance with said selected above information, extracting this broadcast

content to the above tuner when the broadcast time of said selected broadcast content is reached."

(6) The "Accordingly .. … is executed .." of line 11 of column 4 to line 9 of column 5 of the specification is to be amended as follows:

"The reception of the desired broadcast content by the broadcast content receiver at the broadcast time is outlined below.

"First, information containing at least the television broadcast content and the broadcast time is uploaded from the exterior to said broadcast content receiver by way of input means. The information uploaded in this way is temporarily stored in storage means. Next, display control means reads the information from storage means and displays it in a schedule format in the television receiver. Accordingly, the broadcast content and broadcast time can be viewed in the same format as the television broadcast schedule listed in a newspaper or television magazine. In this state, information is selected by selection means by, for example, the moving of a cursor and a flash display or inverse display accompanying this. When the broadcast time of the selected broadcast content is reached, broadcast content output means extracts this broadcast content to the tuner.

"In other words, if the desired content is selected employing selection means from broadcast content displayed by display control means in a schedule format in a television

receiver in advance, when the broadcast time of the broadcast content is reached, it can be automatically selected by the tuner. Accordingly, if the picture image signal of the selected broadcast content is displayed in advance in a desired image outputter (for example, a television receiver), the missing of desired broadcast content can be prevented."

(7) The "recording reservation… as one" from line 9 to line 7 from the bottom of column 5 of the specification is to be amended as follows:

"An example of the application of one embodiment of the broadcast content receiver in a recording reservation controller will be described. First, Fig. 1 is a block diagram that shows in a further simplified form the fundamental configuration of a recording reservation controller. The recording reservation controller shown in the diagram is principally configured from memory means, display control means, selection means, recording setting means and recording reservation means. Information pertaining to television broadcasts is stored in memory means, the stored content being a 1 to 4 week period of information including television broadcast content and the broadcast start and finish times of this content. Display control means displays the information memorized in memory means in a schedule format in the television receiver, and selections means selects the desired broadcast content from this displayed information. Recording setting means sets the broadcast time

of recording reservation means in the video recording device in accordance with the information selected in this way. Fig. 2 shows an actual recording reservation controller,"

(8) The "is output to…" of line 5 of column 10 of the specification is to be amended as follows:

"is output to. In other words, because information pertaining to broadcast content is uploaded from the ROM 32 external thereof by way of the connector 30 and so on, the junction part 10 and the CPU 51 for the upload processing of the program data from the junction part 10 are equivalent to input means of the present invention. The RAM 53 is equivalent to storage means of the present invention, and the S120 processing is equivalent to processing executed by display control means of the present invention."

(9) The "and output." of line 1 of column 12 of the specification is to be amended to "and output. In other words, the cursor key 21 and "setting" key 11 are equivalent to selection means of the present invention."

(10) The "starts the recording …is ended." of lines 7 to 8 of column 16 of the specification is to be amended as follows:

"The memorized channel is received, demodulated and output by the tuner 60, the recording reproducer 65 starts the recording and, when the end time is reached, it ends the recording. In other words, the processing executed in this part constitutes a processing equivalent to broadcast content output means of the present invention to which the processing

for the control of the recording reproducer 65 has been supplemented."

(11) The "recording reservation …can be" of lines 5 to 9 of column 18 of the specification is to be amended as follows:

"According to the broadcast content receiver, because the desired broadcast content is received when the broadcast time is reached, the desired broadcast content can be viewed by the simple display of the picture image signal of the broadcast content received in this way in a desired image outputter (for example, television receiver) and, accordingly, it will not be missed. In addition, recording reservation can be performed without using an image outputter if the picture image signal is output to a video recording device and recorded. The desired program should be selected while viewing the content of the program displayed in a schedule format in the television receiver however the picture image signal is output and, therefore, the operation is extremely simple …".

(12) The "as one embodiment of the present invention .." of lines 11 to 12 of column 18 of the specification is to be amended to "a block diagram showing the fundamental configuration of the recording reservation controller as one embodiment of the present invention; and Fig. 2 is .. ".

Attachment 1

2 Scope of Claims

1 A broadcast content receiver comprising a tuner for outputting the desired broadcast content from a received plurality of television broadcast content, and a television receiver for displaying the picture image signal of broadcast content extracted by said tuner, comprising:

input means for uploading from the exterior to said broadcast content receiver information containing at least the television broadcast content and broadcast time;

storage means for temporarily storing the information uploaded by said input means;

display control means for reading said stored above information and outputting it in a schedule format to the above television receiver;

selection means for selecting the desired broadcast content from said displayed information; and

broadcast content output means for, in accordance with said selected above information, extracting this broadcast content to the above tuner when the broadcast time of said selected broadcast content is reached.

2 The broadcast content receiver as claimed in claim 1, comprising a video recording device for recording of broadcast content extracted by the above tuner during the period of the above broadcast by above broadcast content output means.